The "Commonest Toad" of West Pakistan and a Note on Bufo melanosticius Schneider

M. S. KHAN

Department of Zoology, T.I. College, Rabwah, Pakistan.

The present author, while working on the chronological table of the commonest toad of West Pakistan, identified the common toad of Lahore as *Bufo melanostictus*, on the ground of its being cosmopolitan all over West Pakistan (Khan 1965). Almost all the previous workers (Murray 1884, Annandale and Rao 1918, Günther 1864, Boulenger 1890, Rao 1939 etc.) described the common Indo-Pak toad as *B. melanostictus*. The absence of the characteristic cranial crests in the common toad of this region was regarded, by the present author, as a geographical variation (Günther, op cit.).

The identification was first shadowed by doubt in 1969, when the present author had a chance to study a collection, which he made in 1965 from Mansehra, District Hazara, West Pakistan. That collection contained a specimen of *B. melanostictus* with characteristic well developed cranial crests and coarser tubercles all over the dorsum. Later on the author has a discussion with Mr. M.R. Mirza of Government College, Lahore, while on visit to that city. He showed a large specimen of *B. melanostictus* from the collection of Government College Lahore Natural History Museum, with still higher and more distinct cranial crests, but, unforunately, without any record of locality and collection date.

In mid 1970, the author, came across the works of Minton (1962, '66). Then in late 1970 the works of Dr. Mertens (1969, '70) happen to reach the author through the kindness of their author. Minton (op. cit.) regards B. andersonii Boulenger as the common toad of West Pakistan. He fails to collect B. melanostictus from West Pakistan. While on the other hand Dr. Mertens (op. cit.) regard B. stomaticus to the be commonest toad of this area. He further points that the so called 'tarsal fold' said to be separating andersonii from stomaticus (Boulenger 1891) is absent from the common toad of West Pakistan. Thus he regards these two species conspecific and uses the name B. stomaticus Lütken on priority basis. Later on the present author sent two specimens of the common toad of District Jhang to Dr. Mertens for identification. These specimens were differing from each other distinctly. He very kindly identified these toads as male and female of B. stomaticus. He points the difference between these individuals are due to the sexual dimorphism. Males have stouter and thicker forelimbs, relatively fewer tubercles on the dorsum, dorsum smooth

apparently looking like backward extention of the paratoid glands, more arched dorsum. He further points the variations among the individuals of this species.

Boulenger (1883) and Murray (1884) both described this toad independently. They chanced to give the same specific name to this species (Boulenger andersonii, Murray andersoni), Mertens (1969) quotes Annandale and Rao (op. cit.) who collected the larvae of this species from Rawalpindi (Indo-Gangetic plains) Western and Eastern Himalayas up to 6000 ft., Nepal. While earlier Annandale (1907) regards B. andersoni to be found in Northern Indian peninsula, Arabia, Agra, Rajputana, Sind, East Bengal, Lucknow and Simla Hills above 7000 ft. though subsequent authors do not report this species from Arabia (Haas 1957). Thus Annandale regards andersoni and stomaticus two different species. Recently Mirza & Ali (1972) put the responsibility of this confusion on the shoulders of Murray. But the present author regards all the old authors in one way or the other involved in creating this confusion about the status of the commonest toad of Indo-Pak subscontinent.

Thus the present status of the comonest toad of West Pakistan necessitates to correct the name of this species in some of the former works of the present author, where *Bufo stomaticus* be read for *Bufo melanostictus*:

1965 A Normal Table of *Bufo melanostictus* Schneider. *Biologia*, 11(1): 1-39.

1968 Amphibian Fauna of District Jhang with notes on habits. *Pakistan J. Sci.*, 20 (5 & 6): 227-33.

1969 Morphogenesis of the Digestive Tract of *Bufo melanosticus* Schneider. *Pakistan J. Sci. Res.* 20(3): 99-106.

Bufo melanostictus Schneider:

This species, no doubt, is found in West Pakistan, though Minton (1966) fails to collect this species. Mertens (1969) and the present author by strange coincidence have collected this species from Mansehra, District Hazara, West Pakistan. Mertens thinks that this species has a spoty distribution in this area. Annandale and Rao (op. cit.) report the collection of the larvae of this species from Nainital, Simla Hills, Tista river, Jalpaiguri (North Bengal), Dargelling, Lucknow, Siripur (Bihar), Calcutta, Madras (town), upper Burma and Siam. While Chabanaud (1922) record it from Kashmir, Alan et al., (1959) and Swan & Leviton (1962) from Nepal, where it is stated to be quite common. Thus this sepcies has an interesting distribution in Indo-Pak subcontinent. It is found in northern hilly area in West Pakistan, continuing along the same line in India and descending in more humid areas up to Madras. It further extends in southeast Asia, where it is cosmopolitan and called "common southeast Asian toad." Its distribution in West Pakistan is subject to further investigation of the area reported (near and around Mansehra).

ACKNOWLEDGEMENTS

The author expresses his indebtedness for Dr. Mertens of Senkenberg Natur-Museum, Germany, for identification of the common toad of West Pakistan. Thanks are also due to Malik Zubair Ahmad, a former student of the author for translation of the German literature.

REFERENCES

- Annandale, N. 1907. The distribution of Bufo andersoni. Rec. Indian Mus., 1: 171-172.
- Annandale, N. & Rao, C. R. N. 1918. The tadpoles of the families Ranidae and Bufonidae found in the plains of India. Ibid., 15:25-40.
- Boulenger, G. A. 1883. Description of new species of reptiles and batrachians in the British Museum. Ann. Mag. Nat. Hist., ser. 5, vol. 12: 161-167.
- Boulenger, G. A. 1890. The fauna of British India, inculding Ceylon and Burma. Reptilia and Batrachia. London.
- Boulenger, G.A. 1891. Notes on Lycodon atropurpureus Cantor and Bufo stomaticus Lutken. Ibid., 7(6): 462-463.
- Chabandaud, Paul, 1922. Reptiles et batraciens. In: Mission Guy Babult dans les Provinces Centrales de l'Inde et dans la region occidentale de l'himalaya. Resultats scientifiques. Paris: 1-13.
- Günther, A. C. L. Gotthilf, 1864. Reptiles of British India. Ray Society, London.
- Haas, G. 1957. Some Amphibians and Reptiles from Arabia. Proc. Calif. Acad. Sci. XX X (3): 47-86.
- Leviton, A. E., G. S. Myers and L. W. Swan. 1956. Zoological results of the California Himalayan expedition to Makalu, Eastern Nepal. 1. Amphibians and Reptiles. Occ. Pap. Nat. Hist. Mus. Stan. Univ. No. 1: 1-18.
- Mertens, R. 1969. Die Amphibien und Reptilien West Pakistan. Stuttgarter Betr. Naturkunde, No. 197: 1-96.
- Mertens, R. 1970. Die Amphibien und Reptilien West Pakistan Ibid., No. **216**: 1-5.
- Minton, A. 1962. An annotated key to the amphibians and reptiles of Sind and Las Bela. Amer. Mus. Novitats, New York, Nr. 2081: 1-60.
- Minton, S.A. 1966. A contribution to the herpetology of West Pakistan. Bull. Amer. Mus. Nat. Hist. New York, 134(2); 29-184.
- Mirza, M. R. & Ali, A. 1972. Amphibians and Chelonians of Lahore. *Biologia*, **18(1)**: 81-87.
- Murray, J. A. 1884. The vertebrate zoology of Sind. London and Bombay.
- Rao, H. S. 1939. An outline of the fauna of India: In: An outline of the field Sciences of India, Edited: Sunder Lal Hora. Ind. Sci. Cong. Asso. Calcutta: 91-124.